



PLANT DISEASE AND INSECT ADVISORY

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Natural Enemies are Working on Greenbugs in Oklahoma Winter Wheat Tom A. Royer, OSU Extension Entomologist



This year, scientists, specialists and county educators in Oklahoma, Texas and Kansas are validating the Glance ‘n Go sampling system for greenbugs. We have 8 demonstration plots in Oklahoma; 4 in north-central, and 4 in southwest Oklahoma. Our most recent sampling showed that greenbug thresholds were exceeded in several of our plots in SW Oklahoma, but we also found a big increase in activity by an important natural enemy of greenbugs, *Lysiphlebus testaceipes*.

Lysiphlebus is a tiny parasitic wasp that attacks cereal aphids. It can be very effective at controlling an outbreak. Many of our plots have enough *Lysiphlebus* activity to NOT spray the plots, even though greenbug numbers have exceeded treatment thresholds. In fact, this wasp is so effective, that we incorporated their activity in our Glance ‘n Go sampling forms. These forms can be accessed through the Greenbug Expert System at <http://entopl.okstate.edu/gbweb/>. Just click on “Links”, then “Cereal Aphids Pest Management” in the list under “Agricultural Models” and you will find yourself in the Greenbug Expert System. By following some simple instructions, you can use the Greenbug Calculator to determine an economic threshold based on the cost of treating the field and the price of wheat. Once a threshold is determined, a scouting form can be printed and used to record your sampling results and make a treatment decision. When scouting with the Glance ‘n Go system, just keep a running count of tillers that have aphid mummies on them as well. When enough samples have been taken to make a decision to treat, look at the total number of tillers that had mummies on them. If there is enough mummy activity, you will be directed to NOT TREAT, even if you have exceeded the treatment threshold for greenbugs!



Because the price of wheat is so high, greenbug treatment thresholds in March should probably fall around 1-2 greenbugs per stem (tiller). However, *Lysiphlebus* may have already taken care of your greenbug infestation, so check your field and see if you can save the cost of an unnecessary insecticide application.

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